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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/977,175 10/12/2001 Richard H. Balmer A148 1610.1 2853 EXAMINER 7590 03/02/2004 Douglas E. Winters LAM, CATHY FONG FONG PAPER NUMBER ART UNIT

Armstrong World Industries, Inc. 2500 Columbia Ave., Legal Grp. - Bldg. 701 P.O. Box 3001 Lancaster, PA 17604-3001

1775 DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		iA	
4 3.5	Application No.	Applicant(s)	
	09/977,175	BALMER ET AL.	
Office Action Summary	Examiner	Art Unit	-
	Cathy Lam	1775	
The MAILING DATE of this communication ap		the correspondence address	_
Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rerol  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statul Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a repoly within the statutory minimum of thirty will apply and will expire SIX (6) MONTI.e, cause the application to become ABA	ly be timely filed (30) days will be considered timely. HS from the mailing date of this communication. NDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on <u>22 December 2003</u> .			
2a)⊠ This action is <b>FINAL</b> . 2b)□ This action is non-final.			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is			
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D.	11, 453 O.G. 213.	
Disposition of Claims			
4) Claim(s) 1-8, 19-30 is/are pending in the appl	lication.		
4a) Of the above claim(s) is/are withdrawn from consideration.			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-8 and 19-30</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/	or election requirement.		
Application Papers			
9)☐ The specification is objected to by the Examir	ier.		
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).			
11) The oath or declaration is objected to by the E	Examiner. Note the attached	Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
<ul> <li>12) Acknowledgment is made of a claim for foreig</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documer</li> <li>2. Certified copies of the priority documer</li> <li>3. Copies of the certified copies of the pri</li> </ul>	nts have been received. nts have been received in Ap	plication No	
application from the International Bure	au (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a lis	st of the certified copies not r	eceived.	
Attachment(s)			
1) Notice of References Cited (PTO-892)	4) Interview Su	ımmary (PTO-413) /Mail Date	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08		ormal Patent Application (PTO-152)	
Paper No(s)/Mail Date	6) Other:	<u>.</u>	

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In view of the amendment, remarks and Declaration filed on December 22<sup>nd</sup>, 2003, the 112 and 102 rejections have been withdrawn. In the amendment (ending on page 7) and the remarks (beginning on page 9), there seems to have 1 page missing (ie. page 8). Applicant is required to submit that missing page when respond to this office action. The examiner, also acknowledged the cancellation of claims 9-18. The pending claims however are unpatentable as following:

### Claim Rejections - 35 USC § 102

1. Claims 1, 6, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Drout et al (US 5084501).

Drout discloses a highly filled PVC resin composition comprised of 95wt% of filler particles and resin particles. Drout's resin composition is for use in the resilient flooring field.

The filler particles have larger size than the resin particles (col 4 L 3-6). The resin particles which has smaller size particles are coated onto the surface of the relatively larger filler particles (col 3 L 42-48).

Drout teaches that the filler particles are limestone, aluminum trihydrate and quartz, etc. these materials are well known as opaque materials. The resin particles are dispersion grade PVC resin which conventionally is transparent (col 3 L 50-53 & L 61-65).

The examiner takes the position that the filler particles resemble the pigmented particles and the resin particles resemble the transparent or translucent particles.

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Regarding the interface of the two particle layers, the examiner takes the position that it is a natural phenomenon that some (top) smaller particles will seep into the (bottom) larger filler particle layer because the filler particle layer is a porous layer and both were coated in plasticizer and/or stabilizer, and both were not in hardened state.

### Claim Rejections - 35 USC § 103

2. Claims 1-8 and 19-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drout et al (US 5084501) in view of Lussi et al (US 5290591).

Drout teaches a resilient flooring material comprised of a powdered highly filled PVC resin. The powdered highly filled PVC resin is comprised of a larger size filler particles (as a bottom layer) and a smaller size PVC resin particles as a surface layer (col 3 L 42-47 & L 37-39). Drout clearly teaches that the smaller sized particles would coat or adhere to the surface of the large filler particles.

Drout however does not teach the relative thickness of the filler and resin particle layers nor does it mention the filler particles are pigmented or having any design or pattern effect. Drout does not explicitly state the resin particles are transparent or translucent or the degree of transparency.

Lussi discloses a decorative inlaid flooring material comprised of a substrate, a printed layer and an adhesive matrix layer, all in the named order.

The adhesive matrix layer consists of a plastisol layer and a dense loading of transparent and/or translucent and colored spheroidal particles. The particles range from about 0.004 inches to about 0.04 inches. Such matrix layer is applied over the

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printed pattern so as to let the underprint show through to generate a unique visual effect (col 4 L 42-47).

The transparent and/or translucent particles are PVC resin particles (col 5 L 3-5). The colored spheroidal aprticles contain colorant, dye or pigment and can be materials such as mica, ceramic, metals, rubbers, polymer and resin compositions (col 9 L 27-32, L 38-39).

In view of the prior art teachings, one skill in the art would fabricate a three dimensional thermoplastic rod that comprised of pigment particles layers as the lower layer and transparent or translucent particles layer over the "decorated" layer because transparent or translucent cover layer allows the "decoration" to show through and to give a protection to the bottom layer. Furthermore, one skill in the art would choose a desired degree of transparency, thickness and design because these are a matter of design choice.

# Response to Arguments

- 1. Applicant's arguments filed on December 22<sup>nd</sup> 2003 have been fully considered but they are not persuasive. Applicant disagrees with the art rejections and raises the following issues:
- A. Drout's highly filled resin composition is a 60-95% resin composition, it does not has sufficient resin to yield the necessary strength to bond two surface covering sheets together.
- B. Drout's resin particles are not subjected to heat and pressure prior to mixing with filler particles but rather after they have been mixed.

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- C. Drout was to obtain a uniform distribution of resin and filler particles.
- 2. In respond to the above issues:
- A. Nowhere in any of the claims has stated the amount of resin (matrix) used.

  Thus, applicant has not distinguished any differences between Drout and the present invention in this regard.
- B. Drout's resin particles were subjected to heat and pressure after coated onto the filler particles. The examiner takes the position that the resin particles, in fact were still made into transparent particles. Regardless of the heat and pressure were done before or afterward, the resulting products are the same.
- C. Drout's hightly filled PVC resin has a relative size differential between the filler particles and the resin particles (col 3 L 6-col 4 L 7). This passage clearly shows the particles of the two kinds are not uniformly distributed.

#### Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cathy Lam whose telephone number is (571) 272-1538. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cathy Lam Primary Examiner Art Unit 1775

athy Lam

cfl February 23, 2004